

CHESTER COUNTY

395052075434501. Local number, CH 5176
(New Garden Township, Chester County, Spray Irrigation Project)

LOCATION.--Lat 39°50'52", long 75°43'45", Hydrologic Unit 02040205, at Spray Irrigation Site in New Garden Township.

Owner: New Garden Township Municipal Authority.

AQUIFER.--Felsic Gneiss of Precambrian age.

WATER-LEVEL RECORDS

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 89 ft, cased to 89 ft, closed end, screened from 69-89 ft.

INSTRUMENTATION.--Electronic data logger with 60-minute recording interval.

DATUM.--Elevation of land surface is 338.6 ft above sea level. Measuring point: Top of plywood shelf, 3.2 ft above land-surface datum.

REMARKS.--In addition to the daily mean water levels shown below, daily maximum and minimum water levels, since July 1998, are also available from the District Office. Data for this project are presented in tables on pages XXX, and XXX.

PERIOD OF RECORD.--July 14, 1998 to current year.

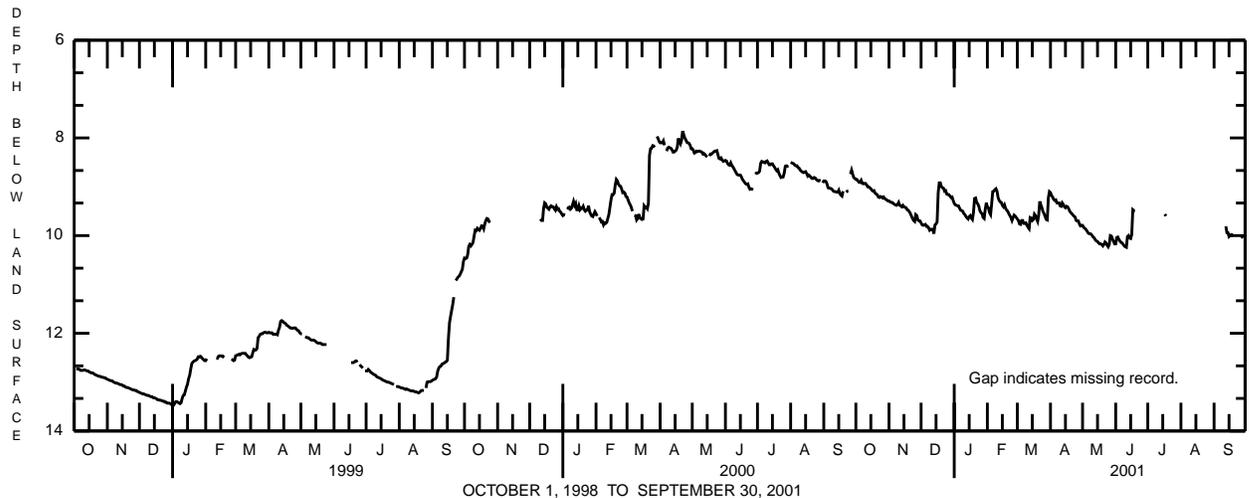
EXTREMES FOR PERIOD OF RECORD.--The extremes shown are extremes of the instantaneous depth below land surface for the period of record indicated above.

Highest water level, 7.83 ft below land-surface datum, Apr. 22, 2000; lowest, 13.47 ft below land-surface datum, Jan. 1-3, 1999.

EXTREMES FOR CURRENT YEAR.--Highest water level, 8.84 ft below land-surface datum, Oct. 1, 2; lowest, 10.25 ft below land-surface datum, May 25.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.85	9.29	9.74	9.34	9.41	9.66	9.12	9.79	10.17	---	---	---
2	8.85	9.31	9.78	9.37	9.43	9.69	9.18	9.83	10.04	---	---	---
3	8.88	9.32	9.79	9.38	9.53	9.76	9.21	9.85	10.03	---	---	---
4	8.91	9.32	9.78	9.39	9.57	9.77	9.26	9.87	10.08	---	---	---
5	8.91	9.34	9.77	9.39	9.35	9.69	9.28	9.90	10.11	---	---	---
6	8.87	9.36	9.81	9.44	9.10	9.69	9.27	9.94	10.14	---	---	---
7	8.93	9.37	9.81	9.48	9.09	9.75	9.33	9.96	10.15	---	---	---
8	8.94	9.38	9.84	9.49	9.06	9.75	9.33	9.96	10.18	---	---	---
9	8.93	9.36	9.89	9.50	9.04	9.74	9.33	9.97	10.21	---	---	---
10	8.93	9.32	9.87	9.55	9.09	9.79	9.39	10.00	10.23	---	---	9.77
11	8.96	9.38	9.87	9.57	9.22	9.83	9.40	10.03	10.24	---	---	---
12	9.00	9.39	9.87	9.61	9.28	9.86	9.33	10.05	10.02	---	---	9.81
13	9.00	9.41	9.96	9.64	9.31	9.63	9.36	10.09	10.00	---	---	9.94
14	9.02	9.38	9.78	9.66	9.32	9.64	9.41	10.11	10.05	---	---	9.94
15	9.04	9.41	9.76	9.61	9.38	9.69	9.43	10.12	10.06	---	---	10.02
16	9.07	9.42	9.72	9.59	9.41	9.67	9.40	10.15	9.98	---	---	10.00
17	9.09	9.43	9.12	9.64	9.37	9.56	9.41	10.17	9.47	9.56	---	9.98
18	9.08	9.47	8.92	9.67	9.44	9.59	9.45	10.17	9.49	9.60	---	9.99
19	9.13	9.48	8.92	9.53	9.48	9.66	9.50	10.18	9.49	---	---	9.97
20	9.15	9.51	9.00	9.24	9.50	9.71	9.53	10.21	---	---	---	---
21	9.16	9.55	9.02	9.23	9.55	9.58	9.55	10.18	---	---	9.58	---
22	9.21	9.60	9.03	9.32	9.59	9.30	9.58	10.13	---	---	---	---
23	9.22	9.65	9.09	9.35	9.63	9.37	9.60	10.15	---	---	---	---
24	9.20	9.69	9.08	9.40	9.69	9.43	9.62	10.20	---	---	---	---
25	9.21	9.71	9.15	9.49	9.63	9.51	9.69	10.23	---	---	---	---
26	9.23	9.57	9.16	9.53	9.58	9.55	9.70	10.18	---	---	---	10.03
27	9.21	9.59	9.16	9.55	9.60	9.61	9.70	10.00	9.63	---	---	10.02
28	9.24	9.68	9.19	9.63	9.63	9.67	9.76	10.01	---	---	---	10.05
29	9.26	9.70	9.22	9.65	---	9.68	9.80	10.07	---	---	9.70	---
30	9.27	9.70	9.21	9.46	---	9.23	9.79	10.12	---	---	---	---
31	9.29	---	9.28	9.33	---	9.10	---	10.17	---	---	---	---
MEAN	9.07	9.47	9.47	9.48	9.40	9.62	9.46	10.06	9.99	9.58	9.64	9.96
MAX	9.29	9.71	9.96	9.67	9.69	9.86	9.80	10.23	10.24	9.60	9.70	10.05
MIN	8.85	9.29	8.92	9.23	9.04	9.10	9.12	9.79	9.47	9.56	9.58	9.77



CHESTER COUNTY

395052075434501. Local number, CH 5176--Continued
 (New Garden Township, Chester County, Spray Irrigation Project)

WATER-QUALITY RECORDS

REMARKS.-- Samples collected with submersible pump from recovery water after well was pumped more than three casing volumes. Some values for "dissolved" parameters exceed values for the corresponding "total" parameter. These results are within the limits of analytical precision and methods.

PERIOD OF RECORD.--June 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY ANA-LYZING SAMPLE NUMBER (00028)	AGENCY COL-LECTING SAMPLE NUMBER (00027)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG (00925)	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)
OCT 2000											
19...	1100	9813	1028	2.6	6.5	528	12.4	--	--	--	--
NOV											
20...	1000	9813	1028	6.2	6.8	488	12.0	--	--	--	--
DEC											
12...	1200	9813	1028	2.2	6.7	519	11.2	74.8	11.8	6.09	11.6
JAN 2001											
18...	1400	9813	1028	4.8	6.5	485	11.9	--	--	--	--
FEB											
27...	1500	9813	1028	6.3	6.4	524	12.2	--	--	--	--
MAR											
28...	1300	9813	1028	4.7	6.7	485	12.4	71.7	10.6	6.70	11.8
MAY											
10...	1000	9813	1028	3.0	6.7	471	12.5	--	--	--	--
31...	1100	9813	1028	1.2	6.8	538	13.0	--	--	--	--
JUN											
27...	1400	9813	1028	1.9	6.5	464	12.8	64.2	10.0	5.22	10.6
JUL											
18...	1400	9813	1028	2.0	6.4	500	12.6	--	--	--	--
AUG											
29...	1100	9813	1028	5.5	6.7	530	13.3	--	--	--	--

DATE	ANC WATER UNFLTRD IT FIELD (MG/L AS CACO3) (00419)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN DIS-SOLVED (MG/L AS N) (00602)
OCT 2000										
19...	84	--	--	--	--	--	--	<.020	<.02	17
NOV										
20...	82	--	--	--	--	--	--	<.020	<.02	18
DEC										
12...	88	<.20	38.8	<.2	25.0	31.0	408	<.020	--	16
JAN 2001										
18...	88	--	--	--	--	--	--	<.020	<.02	17
FEB										
27...	78	--	--	--	--	--	--	<.020	<.02	16
MAR										
28...	97	<.20	40.8	<.2	22.0	33.6	292	<.020	--	17
MAY										
10...	91	--	--	--	--	--	--	<.020	<.02	16
31...	101	--	--	--	--	--	--	<.020	<.02	16
JUN										
27...	82	<.20	40.9	<.2	25.0	25.4	350	<.020	--	24
JUL										
18...	93	--	--	--	--	--	--	<.020	<.02	20
AUG										
29...	93	--	--	--	--	--	--	<.020	<.02	18

CHESTER COUNTY

395052075434501. Local number, CH 5176--Continued
 (New Garden Township, Chester County, Spray Irrigation Project)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	BORON, DIS- SOLVED (µG/L AS B) (01020)	IRON, DIS- SOLVED (µG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (µG/L AS MN) (01056)	ZINC, DIS- SOLVED (µG/L AS ZN) (01090)
OCT 2000									
19...	15.6	.510	.016	.014	--	--	--	--	--
NOV									
20...	15.7	.270	.013	.012	--	--	--	--	--
DEC									
12...	15.4	.860	<.010	<.010	1.2	<200	<20	13.0	38
JAN 2001									
18...	16.0	.310	.016	.015	--	--	--	--	--
FEB									
27...	15.7	.410	.013	.015	--	--	--	--	--
MAR									
28...	12.8	1.82	.012	<.010	1.1	<200	<20	14.0	55
MAY									
10...	16.0	.210	.011	<.010	--	--	--	--	--
31...	17.2	.170	.013	<.010	--	--	--	--	--
JUN									
27...	16.3	.280	.011	.012	<1.0	<200	<20	<10.0	11
JUL									
18...	17.4	.300	.013	<.010	--	--	--	--	--
AUG									
29...	16.6	.440	.016	.013	--	--	--	--	--